IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

OPTIS WIRELESS TECH., LLC, et al.,

Plaintiffs,

Civil Action No. 2:17-cv-123-JRG-RSP

v.

HUAWEI TECHS. CO. LTD., et al.,

Defendants.

FINAL JURY INSTRUCTIONS

Members of the jury:

You have now heard the evidence in this case, and I will now instruct you on the law that you must apply. Each of you are going to have your own printed copy of these final jury instructions that I'm giving you now, so there's really no need for you to take notes unless you just particularly want to.

It's your duty to follow the law as I give it to you. On the other hand, Ladies, as I've said previously, you, the jury, are the sole judges of the facts in this case. Do not consider any statement that I have made in the course of the trial or make during these instructions as an indication to you that I have any opinion about the facts in this case.

You're about to hear closing arguments from the attorneys. Statements and arguments of the attorneys, I remind you, are not evidence, and they are not instructions on the law. They're intended only to assist the jury in understanding the evidence and the parties' contentions.

1

A verdict form has been prepared for you. You are to take this verdict form with you to the jury room; and when you have reached a unanimous decision or agreement as to the verdict, you're to have your foreperson fill in the blanks in the verdict form, date it, and sign it.

Answer each question in the verdict form from the facts as you find them to be. Do not decide who you think should win the case and then answer the questions to reach that result. Again, your answers and your verdict must be unanimous.

In determining whether any fact has been proven in this case, you may, unless otherwise instructed, consider the testimony of all the witnesses, regardless of who may have called them, and you may consider the effect of all the exhibits received and admitted into evidence, regardless of who may have produced or presented them. You, the jurors, are the sole judges of the credibility of each and every witness and the weight and effect to be given to the evidence in this case.

As I've told you previously, the attorneys in this case are acting as advocates for their competing parties and their competing claims, and they have a duty to object when they believe evidence is offered that should not be admitted under the rules of the Court.

In that case, when the Court has sustained an objection to a question addressed to a witness, you are to disregard the question entirely, and you may not draw any inferences from its wording or speculate about what the witness would have said if I had permitted them to answer the question. If, on the other hand, the objection was overruled, then you're to treat the answer to the question and the question itself just as if no objection had been made; that is, like any other question and answer.

Now, at times during the trial, it was necessary for the Court to talk to the lawyers here at the bench or outside of your hearing when you were in the jury room. This happens because during a trial, there are things that sometimes come up that do not involve the jury. You should not speculate, Ladies, about what was said during such discussions that took place outside of your presence.

Now, there are two types of evidence that you may consider in properly finding the truth as to the facts in this case. One is direct evidence, such as the testimony of an eyewitness. The other is indirect or circumstantial evidence; that is, the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, you should know that the law makes no distinction between direct and circumstantial evidence, but simply requires that you, the jury, find the facts based on the evidence presented, both direct and circumstantial.

The parties have stipulated or agreed to some facts in the case. A list of the stipulations has been included in your juror notebooks. When the lawyers for both sides stipulate as to the existence of a fact, you must, unless otherwise instructed, accept the stipulation as evidence and regard the fact as proven.

Certain testimony in the case has been presented to you through depositions. A deposition is the sworn, recorded answers to questions asked to a witness in advance of the trial. If a witness cannot be present to testify in person, then the witness's testimony may be presented under oath in the form of a deposition. As I told you earlier, before the trial, the attorneys representing the parties in this case questioned these deposition witnesses under oath. At that time, a court reporter was present and recorded their sworn testimony. Deposition testimony is entitled to the same consideration by you, the jury, as testimony given by a witness in person from the witness stand in open court. Accordingly, you should judge the credibility and importance of the deposition testimony to the best of your ability, just as if the witness had testified before you in open court.

While you should consider only the evidence in this case, Ladies, you should understand that you are permitted to draw such reasonable inferences from the testimony and the exhibits as you feel are justified in the light of common experience.

In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and the evidence in this case. However, you should not base your decision on any evidence not presented by the parties in open court during the trial of this case, including your own personal experiences.

Now, unless I instruct you otherwise, you may properly determine that the testimony of a single witness is sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary if after considering all of the other evidence you believe that single witness.

When knowledge of a technical subject may be helpful to the jury, a person who has special training and experience in that technical field, called an expert witness, is permitted to state his or her opinions on those technical matters to the jury. However, member of the jury, you're not required to accept those opinions. As with any other witness, it is solely up to you to decide who you believe and who you don't believe and whether or not you want to rely on their testimony.

Now, certain exhibits have been shown to you during the trial that were illustrations. We call these types of exhibits demonstrative exhibits or sometimes just demonstratives for short. Demonstrative exhibits are a party's description, picture, or model to describe something involved in this trial. If your recollection of the evidence differs from the demonstratives, you should rely on your recollection. Demonstrative exhibits are sometimes called jury aids. The demonstrative is not itself evidence, but the witness's testimony during which they use the demonstrative is evidence.

In any legal action, facts must be proven by a required amount of evidence known as the burden of proof. The burden of proof in this case is on Plaintiff for some issues, and it is on Defendants for other issues. There are two burdens of proof that you will apply in this case, the preponderance of the evidence and clear and convincing evidence.

The Plaintiffs in this case, Optis Wireless Technology, LLC, PanOptis Patent Management, LLC, and Optis Cellular Technology, LLC, who I will refer to simply as the Plaintiffs or PanOptis, have the burden of proving patent infringement by a preponderance of the evidence. PanOptis also has the burden of proving willful patent infringement by a preponderance of the evidence. PanOptis also has the burden of proving damages for any patent infringement by a preponderance of the evidence.

A preponderance of the evidence means evidence that persuades you that a claim is more probably true than not true. Sometimes this is talked about as being the greater weight and degree of credible testimony.

The Defendants in this case, Huawei Device USA, Inc. and Huawei Device (Shenzhen) Co. Ltd., who I will refer to collectively as Huawei or Defendants, have the burden of proving patent invalidity by clear and convincing evidence. Clear and convincing evidence means evidence that produces in your mind an abiding conviction that the truth of the party's factual contentions are highly probable. Although proof to an absolute certainty is not required, the clear and convincing evidence standard requires a greater degree of persuasion than is necessary for the preponderance of the evidence standard. If the proof establishes in your mind an abiding conviction in the truth of the matter, then the clear and convincing evidence standard has been met.

These standards are different from what you may have learned about in criminal proceedings where a fact is proven beyond a reasonable doubt. On a scale of the various standards

of proof, as you move from the preponderance of the evidence, where the proof need only be sufficient to tip the scales in favor of the party proving the fact, to at the other end beyond a reasonable doubt, where the fact must be proven to a very high degree of certainty, you may think of clear and convincing evidence as being between those two standards.

In determining whether any fact has been proved by a preponderance of the evidence or by clear and convincing evidence, you may, unless otherwise instructed, consider the stipulations, the testimony of all the witnesses, regardless of who called them, and all the exhibits received into evidence during the trial, regardless of who may have produced them.

As I did at the start of the case, I will first give you a summary of each side's contentions in this case. I will then provide you with detailed instructions on what each side must prove to win on each of its contentions.

As I previously told you, this is an action for patent infringement. The case concerns five separate United States patents:

- United States Patent No. 6,604,216, which we have referred to throughout the trial as the '216 Patent;
- United States Patent No. 7,769,238, which we have referred to throughout the trial as the '238 Patent;
- United States Patent No. 8,208,569, which we have referred to throughout the trial as the '569 Patent;
- United States Patent No. 8,385,284, which we have referred to throughout the trial as the '284 Patent; and
- United States Patent No. 8,437,293, which we have referred to throughout the trial as the '293 Patent.

I will refer to these patents as the "patents-in-suit" or the "asserted patents." In so doing, I am referring to all five of them collectively. PanOptis contends that Huawei directly infringed the following claims of the patents-in-suit:

- Claim 1 of the '216 Patent;
- Claim 1 of the '238 Patent;
- Claims 11 and 17 of the '569 Patent;
- Claim 1 of the '284 Patent; and
- Claim 14 of the '293 Patent.

These are the "asserted claims."

PanOptis seeks money damages from Huawei for allegedly infringing all of the asserted claims by making, using, selling, and offering for sale within the United States, and/or importing into the United States, products that PanOptis argues are covered by those claims.

For the '216, '569, '284, and '293 Patents, Huawei's Accused Products are those listed Exhibit A that is attached to these instructions. For the '238 Patent, Huawei's Accused Products are those listed in Exhibit B that is attached to these instructions. Huawei denies that it has infringed any asserted claim of the asserted patents. Huawei contends that during the terms of these patents, it did not make, use, sell, or offer for sale within the United States, or import into the United States, any products that infringe any of the asserted claims of the asserted patents. Huawei also denies that PanOptis is entitled to any damages.

Huawei contends that all the asserted claims of all the asserted patents are invalid as obvious in view of prior art that existed before PanOptis' alleged inventions and, therefore, that all the asserted claims of all the asserted patents are invalid.

Invalidity is a defense to infringement. Invalidity and infringement are separate and distinct issues.

Your job is to decide whether Huawei has infringed any of the asserted claims and whether any of the asserted claims are invalid. If you decide that any asserted claim of any asserted patent has been infringed and is not invalid, you will then need to decide any money damages to be awarded to PanOptis to compensate it for the infringement. You will also need to make a finding as to whether the infringement was willful. If you decide that any infringement was willful, that decision should not affect any damages award you make. I will take willfulness into account later.

Before you can decide many of the issues in this case, you will need to understand the role of patent "claims." The patent claims are the numbered sentences at the end of each patent. The claims are important because it is the words of the claims that define what a patent covers. The figures and text in the rest of the patent provide a description and/or examples of the invention and provide a context for the claims, but it is the claims that define the breadth of the patent's coverage. Each claim is effectively treated as if it was a separate patent, and each claim may cover more or less than another claim. Therefore, what a patent covers depends, in turn, on what each of its claims covers.

You will first need to understand what each claim covers in order to decide whether or not there is infringement of the claim and to decide whether or not the claim is invalid. The law says that it is my role to define the terms of the claims and it is your role to apply my definitions to the issues that you are asked to decide in this case. Therefore, as I explained to you at the start of the case, I have determined the meaning of some of the claim terms in this case and provided you with my definitions of those construed terms in your juror notebooks.

You must accept my definitions of these words in the claims as being correct. It is your job to take these definitions and apply them to the issues that you are deciding, including the issues of infringement and validity. You should disregard any evidence presented at trial that contradicts or is inconsistent with the constructions and definition I have given you. For claim terms that I have not construed or defined, you are to use the plain and ordinary meaning of the terms as understood by one of ordinary skill in the art, that is, in the field of the technology of the patent at the time of the alleged invention.

The meaning of the words of the patent claims must be the same when you decide the issues of both infringement and invalidity.

I will now explain how a claim defines what it covers.

A claim sets forth, in words, a set of requirements. Each claim sets forth its requirements in a single sentence with one or more paragraphs. If a device or a method satisfies each of these requirements, then it is covered by and infringes that claim.

There can be several claims in a patent. Each claim may be narrower or broader than another claim by setting forth more or fewer requirements. The coverage of a patent is assessed claim-by-claim. In patent law, the requirements of a claim are often referred to as "claim elements" or "claim limitations." When a thing (such as a product or a process) meets all of the requirements of a claim, the claim is said to "cover" that thing, and that thing is said to "fall" within the scope of that claim. In other words, a claim covers a product or process where each of the claim elements or limitations is present in that product or process. If a product or process is missing even one limitation or element of a claim, then the product or process is not covered by the claim. If a product or process is not covered by the claim, then it does not infringe the claim.

The beginning portion, or "preamble," of a number of the claims in this case uses the word "comprising." The word "comprising," when used in a preamble, means including but not limited to, or containing but not limited to. When comprising is used in the preamble, a device that includes all of the limitations of the claim is covered by the claim even if the device contains additional elements. For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also contains other features, such as wheels on the ends of the legs.

This case involves two types of patent claims: independent claims and dependent claims.

An independent claim does not refer to any other claim of the patent. An independent claim sets forth all of the requirements that must be met in order to be covered by that claim. Thus, it is not necessary to look at any other claim to determine what an independent claim covers.

A dependent claim does not itself recite all of the requirements of the claim but refers to one or more other claims, at least one of which is an independent claim, for some of its requirements. In this way, the claim "depends" on another claim. A dependent claim incorporates all of the requirements of the claim or claims to which it refers, as well as the requirements within the dependent claim itself. The dependent claim adds its own requirements to the claim or claims to which it refers. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and the other claim or claims to which it refers. A product or process that meets all of the requirements of both the dependent claim and the claim or claims to which it refers is covered by that dependent claim.

For each of the Asserted Claims, their independence and dependence is as follows:

- For the '216 Patent: Independent Claim 1;
- For the '238 Patent: Independent Claim 1;

- For the '569 Patent: Independent Claim 11 and Dependent Claim 17;
- For the '284 Patent: Independent Claim 1; and
- For the '293 Patent: Dependent Claim 14.

Please note: while Dependent Claim 14 depends from Independent Claim 12, Independent Claim 12 is not an Asserted Claim and should only be considered in the context of Claim 14's dependency upon it.

Certain claims use the phrase "means for." This "means for" phrase has a special meaning in patent law. It is called a "means-plus-function" requirement. It does not cover all of the structures that could perform the function set forth in the claim. Instead, it covers a structure or set of structures that performs that function and that is either identical or "equivalent" to the structures described in the patent for performing the function. The issue of whether two structures are identical or equivalent is for you to decide. I will explain to you later how to determine whether two structures or two sets of structures are "equivalent" to one another. In the claim construction section of your juror notebooks, I have identified the structures described in the patents for performing the relevant functions. You should apply my definitions of the functions, and the structures described in the patent for performing them, as you would apply my definition of any other claim term.

A patent owner has the right to stop others from using the invention covered by its patent claims in the United States during the life of the patent. If any person makes, uses, sells, or offers for sale within the United States, or imports into the United States, what is covered by the patent claims without the patent owner's permission, that person is said to infringe the patent.

In reaching your decision on infringement, keep in mind that only the claims of a patent can be infringed. You must compare the asserted claims, as I have defined each of them, to the accused products and determine whether or not there is infringement. You should not compare the accused products with any specific example set out in the patent or with the patent owner's commercial products or with the prior art in reaching your decision on infringement. The only correct comparison is between the accused products and the language of the claims, themselves, as the Court has construed them.

You must reach your decision as to each assertion of infringement based on my instructions about the meaning and scope of the claims, the legal requirements for infringement, and the evidence presented to you by the parties.

The issue of infringement is assessed on a claim-by-claim basis. That means there may be infringement as to one claim even if there is no infringement as to other claims.

However, if you find that an independent claim on which other claims depend is not infringed, there cannot be infringement of any dependent claim that refers to or depends on that independent claim. On the other hand, if you find that an independent claim has been infringed, you must still decide separately whether the additional requirements of any dependent claims have been satisfied. That is because a dependent claim includes all the requirements of any of the claims to which it refers, plus its own additional requirements.

In order to prove direct infringement of a patent claim, PanOptis must show by a preponderance of the evidence that the accused product or process includes each and every requirement or limitation of the claim, either literally or under the Doctrine of Equivalents.

In determining whether the accused product or process literally infringes one of the asserted claims in this case, you must compare the accused product or process with each and every one of the requirements or limitations of that claim to determine whether the accused product or process contains each and every limitation recited in the claim. A claim requirement is present if it exists

in an accused product or process just as it is described in the claim language, either as I have explained the language to you or, if I did not explain it, as it would be understood by its plain and ordinary meaning by one of ordinary skill in the art. If an accused product or process omits any requirement recited in a claim, then you must find that the particular product or process does not literally infringe that particular claim.

If an accused product or process does not meet all the requirements of a claim and thus does not literally infringe the claim, there can still be direct infringement if that product or process satisfies the claim under the Doctrine of Equivalents. Under the Doctrine of Equivalents, an accused product or process infringes a claim if the accused product or process performs steps or contains elements corresponding to each and every requirement of the claim that are equivalent to, even though not literally met by, the accused product or process. You may find that a step or element is equivalent to a requirement of a claim that is not literally met if a person having ordinary skill in the field of the technology of the patent would have considered the differences between them to be insubstantial or would have found that the structure performs substantially the same function in substantially the same way to achieve substantially the same result as the requirements of the claim. In order to prove that an accused product or process meets a limitation by equivalents, PanOptis must prove the equivalency to the claim element by a preponderance of the evidence.

A patent can be directly infringed even if the alleged infringer did not have knowledge of the patent and without the infringer knowing what it was doing infringed the claim. A patent may also be directly infringed even though the accused infringer believes in good faith that what it is doing is not infringement of the patent.

As I have previously explained, certain claims include requirements that are means-plusfunction forms. A product meets a means-plus-function requirement of a claim if (1) it has a structure or set of structures that performs the identical function recited in the claim; and (2) that structure or set of structures is either identical or equivalent to one or more of the described structures that I defined earlier as performing the associated function of the claim term. If a product does not perform the specific function recited in the claim, the means-plus-function requirement is not met, and the product does not directly infringe the claim. Alternatively, even if the product has a structure or set of structures that performs the function recited in the claim, but the structure or set of structures is neither identical nor equivalent to the structure that I defined to you as being described in the patent and performing this function, the product does not directly infringe the asserted claim.

In this case, PanOptis argues both that Huawei infringed and, further, that Huawei infringed willfully. If you have decided that Huawei has infringed, you must go on and address the additional issue of whether or not this infringement was willful. Willfulness requires you to determine whether PanOptis proved that it is more likely than not that the infringement by Huawei was especially worthy of punishment. You may not determine that the infringement was willful just because Huawei knew of the asserted patents and infringed them. Instead, willful infringement is reserved for only the most egregious behavior, such as where the infringement is malicious, deliberate, consciously wrongful, or done in bad faith.

To determine whether Huawei acted willfully, consider all facts. These may include, but are not limited, to:

- Whether or not Huawei acted consistently with the standards of behavior for its industry;
- 2. Whether or not Huawei reasonably believed it did not infringe or that the patent was invalid;

- 3. Whether or not Huawei made a good-faith effort to avoid infringing the asserted patents, for example, whether Huawei attempted to design around the asserted patents; and
- 4. Whether or not Huawei tried to cover up its infringement.

None of these factors alone is determinative, and this list is not an exhaustive list of things that you should consider. Your determination of willfulness should incorporate the totality of the circumstances based on all the evidence presented during the trial.

If you decide that any infringement was willful, that decision should not affect any damages award that you might make. I will take willfulness into account later.

I will now instruct you on the rules you must follow in deciding whether or not Huawei has proven that the asserted claims of the asserted patents are invalid. A United States patent is accorded a presumption of validity based on the presumption that the United States Patent and Trademark Office, which you have heard referred to during this trial as the PTO, has acted correctly in issuing the patent. This presumption of validity extends to all issued United States patents, including those that claim the benefit of an earlier filed patent application, such as so-called continuation or continuation-in-part applications.

To prove that any claim of a patent is invalid, Huawei must persuade you by clear and convincing evidence that the claim is invalid. You have heard evidence of prior art that the Patent Office may or may not have evaluated. The fact that any particular reference was or was not considered by the Patent Office does not change Huawei's burden of proof. However, in making your decision whether Huawei has met its burden of proof by clear and convincing evidence as to a particular patent claim, you may take into account the fact that the prior art was not considered by the Patent Office. Prior art differing from the prior art considered by the Patent Office may, but

does not always, carry more weight than the prior art that was considered by the Patent Office. Again, the ultimate responsibility for deciding whether the claims of the patent are valid is up to you, the members of the jury.

Keep in mind that everyone has the right to use existing knowledge and principles. A patent cannot remove from the public the ability to use what was known or obvious before the invention was made or patent protection was sought.

Like infringement, invalidity is determined on a claim-by-claim basis. In making your determination as to invalidity, you should consider each claim separately. If one claim of a patent is invalid, this does not mean that any other claim is necessarily invalid.

Claims are construed the same way for determining infringement as for determining invalidity.

In patent law, a previous device, system, method, publication, or patent that predates the claimed invention is generally called a "prior art reference." Prior art may include any of the following items:

- 1. any product or system that was known or used by others in the United States before the patented inventions were made;
- 2. any patent that issued or any printed publication that published anywhere in the world before the patented inventions were made;
- 3. any product or system that was in public use or on sale in the United States more than one year before the applications for the asserted patents were filed;
- 4. any patents that issued or any printed publication that published anywhere in the world more than one year before the application for the asserted patents were filed;

5. any patent application that was filed in the United States by someone other than the inventors of the asserted patents, before the invention was made.

In this case, Huawei contends that the items listed in Exhibit C that is attached to these instructions are prior art to the '293, '569, and '238 patents.

The priority dates of the '216, '284, '569, '293, and '238 Patents are as follows:

- December 1, 1999, for the '216 Patent;
- December 20, 2007, for the '284 Patent;
- June 12, 2003, for the '569 Patent;
- June 19, 2007, for the '293 Patent; and
- April 15, 2002, for the '238 Patent.

A provisional patent application is a legal document filed with the United States Patent and Trademark Office to establish an early filing date, but it does not become a formal patent application unless the applicant files for a patent within one year.

Huawei contends that certain United States patents are prior art to certain of the asserted claims based on the filing dates of the prior art patent's provisional applications. An issued patent is given the benefit of the earlier filing date of its provisional application if (1) the provisional application contains a written description of the invention claimed in the issued patent in such full, clear, concise, and exact terms to enable a person having ordinary skill in the art to practice the invention claimed in the issued patent, and (2) the subject matter relied upon in the issued patent is supported by the provisional application.

The written-description requirement is satisfied if a person having ordinary skill in the art, reading the provisional patent application would have recognized that it describes the full scope of the claimed invention as it is finally claimed in the issued patent and that the inventor actually

possessed that full scope by the filing date of the provisional application. The written description requirement may be satisfied by any combination of the words, structures, figures, diagrams, formulas, et cetera, contained in the provisional application. The full scope of a claim or any particular requirement in a claim need not be expressly disclosed in the provisional application if a person having ordinary skill in the field of technology of the patent at the time of the filing would have understood that the full scope or the missing requirement is in the written description of the provisional application. It's not necessary that each and every aspect of the claim in the issued patent be explicitly discussed, and specific examples of what is claimed are not required as long as a person having ordinary skill would understand that any aspect not expressly discussed is implicit in the provisional application as originally filed.

The enablement requirement is satisfied if the provisional patent application would permit persons having ordinary skill in the art to make and use the full scope of the invention claimed in the issued patent at the time of provisional filing without having to conduct undue experimentation. However, some amount of experimentation to make and use the invention is allowable.

Huawei contends that certain prior art references listed above qualify as printed publications before the priority dates of the asserted patents.

A printed publication must have been maintained in some tangible form, such as printed pages, typewritten pages, internet publication, or photocopies, and must have been sufficiently accessible to persons interested in the subject matter of its contents.

Information is publicly accessible if it was distributed or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter exercising reasonable diligence can locate it. It is not necessary for the printed publication to have been available to every

member of the public. An issued patent is a printed publication. A published patent application is a printed publication as of its publication date.

Huawei contends that all of the patents-in-suit are invalid as being obvious. Even though an invention may not have been identically disclosed or described before it was made by an inventor, in order to be patentable, the invention also must not have been obvious to a person of ordinary skill in the field of technology of the patent at the time the invention was made or before the filing date of the patent.

Huawei is required to establish that a patent claim is invalid by showing, by clear and convincing evidence, that the claimed invention would have been obvious to persons having ordinary skill in the art at the time the invention was made or patent was filed in the field of the invention.

In determining whether a claimed invention is obvious, you must consider the level of ordinary skill in the field of the invention that someone would have had at the time the invention was made or patent was filed, the scope and content of the prior art, and any differences between the prior art and the claimed invention.

Keep in mind that the existence of each and every element of the claimed invention in the prior art does not necessarily prove obviousness. Most, if not all, inventions rely on building blocks of prior art. In considering whether a claimed invention is obvious, you may but are not required to find obviousness if you find that at the time of the claimed invention or the patent's filing date, there was a reason that would have prompted a person having ordinary skill in the field of the invention to combine the known elements in a way the claimed invention does, taking into account such factors as:

- Whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s);
- 2. Whether the claimed invention provides an obvious solution to a known problem in the relevant field;
- 3. Whether the prior art teaches or suggests the desirability of combining elements claimed in the invention;
- 4. Whether the prior art teaches away from combining elements in the claimed invention; and
- 5. whether the change resulted more from design incentives or other market forces.

To find that it rendered the invention obvious, you must find that the prior art provided a reasonable expectation of success.

In determining whether the claimed invention was obvious, consider each claim separately.

Do not use hindsight. In other words, you should not consider what a person of ordinary skill in the art would know now or what has been learned from the teaching of the asserted patents.

In making these assessments, you should take into account any objective evidence (sometimes called "secondary considerations") that may shed light on the obviousness or not of the claimed invention, such as:

- Whether the invention was commercially successful as a result of the merits of the claimed invention (rather than the result of design needs or market-pressure advertising or similar activities);
- 2. Whether the invention satisfied a long-felt need;
- 3. Whether others had tried and failed to make the invention;
- 4. Whether others invented the invention at roughly the same time;

- 5. Whether others copied the invention;
- 6. Whether there were changes or related technologies or market needs contemporaneous with the invention;
- 7. Whether the invention achieved unexpected results;
- 8. Whether others in the field praised the invention;
- 9. Whether persons having ordinary skill in the art of the invention expressed surprise or disbelief regarding the invention;
- 10. Whether others sought or obtained rights to the patent from the patent holder; and
- 11. Whether the inventor proceeded contrary to accepted wisdom in the field.

No factor alone is dispositive, and you must consider the obviousness or non-obviousness of the inventions as a whole. These factors are relevant only if there is a connection, or nexus, between the factor and the asserted claims of the asserted patents.

Even if you conclude that some of the above indicators have been established, those factors should be considered along with all the other evidence in the case in determining whether Huawei has proven that the claimed invention would have been obvious.

Several times in my instructions, I referred to a person of ordinary skill in the "art," or in the field of the invention. It is up to you to decide the level of ordinary skill in the field of the invention. In deciding what the level of ordinary skill in the field of the invention is, you should consider all the evidence introduced at trial, including but not limited to:

- The levels of education and experience of the inventor and other persons actively working in the field;
- 2. The types of problems encountered in the field;
- 3. Prior art solutions to those problems;

- 4. Rapidity with which innovations are made; and
- 5. The sophistication of the technology.

If you find that Huawei has infringed any valid claim of PanOptis' asserted patents, then you must consider what amount of damages to award to PanOptis. I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win this case on any issue.

The damages you award must be adequate to compensate PanOptis for any infringement you may find. However, you must not award PanOptis more damages than are adequate to compensate for the infringement, nor should you include any additional amount for the purpose of punishing Huawei or setting an example.

PanOptis has the burden to establish its damages by a preponderance of the evidence.

PanOptis is not entitled to damages that are remote or speculative.

PanOptis seeks damages in the form of a reasonable royalty. A reasonable royalty is defined as the amount of money PanOptis and Huawei would have agreed on as a fee for Huawei's use of PanOptis' inventions at the time the infringement began.

The determination of a damages award is not an exact science, and the amount need not be proven with unerring precision. You may approximate, if necessary, the amount to which PanOptis is entitled. While damages may not be determined by mere speculation or guess, it may be proper to award a damages amount if the evidence shows the extent of the damages as a matter of just and reasonable inference.

I will give you more detailed instructions regarding damages shortly. Note, however, that PanOptis is entitled to recover no less than a reasonable royalty for each infringing sale or use of its patented technology..

A royalty is a payment made to a patent holder in exchange for the right to make, use, or sell the claimed invention. A reasonable royalty is the amount of royalty payment that a patent holder and the alleged infringer would have agreed to in a hypothetical negotiation taking place at a time prior to when the infringement first began. In considering this hypothetical negotiation, you should focus on what the expectations of the patent holder and the alleged infringer would have been had they entered into an agreement at that time, and had they acted reasonably in their negotiations. In determining this, you must assume that both parties believed the patent was valid and infringed and that both parties were willing to enter into an agreement. The reasonable royalty you determine must be a royalty that would have resulted from the hypothetical negotiation, and not simply a royalty either party would have preferred. Evidence of things that happened after the infringement first began can be considered in evaluating the reasonable royalty only to the extent that the evidence aids in assessing what royalty would have resulted from a hypothetical negotiation.

Your determination does not depend on the actual willingness of the parties to the lawsuit to engage in such negotiations. Your focus as part of this hypothetical negotiation should be on what the parties' expectations would have been had they willingly entered into negotiations for royalties at the time of first infringement.

Where the parties dispute a matter concerning damages for infringement, it is PanOptis' burden to prove that it is more probable than not that PanOptis' version is correct. PanOptis must prove the amount of its damages with reasonable certainty, but need not prove the amount of damages with mathematical precision. But again, PanOptis is not entitled to damages that are remote or speculative. If you find that any of the asserted patents are both infringed and not invalid, you must award damages to compensate for any such infringement.

A reasonable royalty must reflect that the '216, '569, '293, and '284 Patents have been declared to be essential to the cellular standards of the European Telecommunications Standards Institute, sometimes called "ETSI." Further, PanOptis committed to license the '216, '569, '293, and '284 Patents on fair, reasonable, and non-discriminatory—or "FRAND"—terms.

Because of this FRAND commitment, I will refer at times in my instructions to "standard-essential" patents. By referring to standard-essential patents, the Court is not instructing you that the asserted patents are actually essential to any standard. Again, it is up to you, the jury, to decide whether or not PanOptis has proven that the patents are standard-essential and infringed.

Ericsson and Panasonic—PanOptis' predecessors-in-interest with respect to the asserted patents—submitted written commitments to ETSI covering the '216, '569, '293, and '284 Patents, in which they agreed to grant irrevocable licenses on fair, reasonable, and non-discriminatory—or FRAND—terms and conditions. Because Ericsson and Panasonic are predecessors-in-interest to PanOptis, PanOptis has the same FRAND obligations as Ericsson and Panasonic had when they submitted their written commitments to ETSI.

You must make sure that any reasonable royalty determination takes into account PanOptis' FRAND obligations as the Court has just explained them to you. A reasonable royalty in this case for the '216, '569, '293, and '284 Patents cannot exceed the amount permitted under PanOptis' FRAND obligations. In determining what amount is a FRAND royalty, you may consider any evidence of patent hold-up and royalty stacking. The '238 Patent has not been declared essential to any cellular standard, and, therefore, a reasonable royalty determination regarding the '238 Patent need not take into account any FRAND obligations.

I will provide you with additional instructions on how the FRAND commitment for the asserted patents affects your determination of reasonable royalty.

In determining the reasonable royalty, you should consider all the facts known and available to the parties at the time the infringement began. Some of the kinds of factors that you may consider in making your determination are:

- 1. The royalties received by the patentee for licensing of the patents-in-suit proving or tending to prove an established royalty.
- 2. The rates paid by a licensee for the use of other patents comparable to the patents-in-suit.
- The nature and scope of the license as exclusive or non-exclusive or as restricted or non-restricted in terms of territory or with respect to the parties to whom the manufactured products may be sold.
- 4. Whether being able to use the patented invention helps in making sales of other products or services;
- 5. The duration of the patent and the term of the license.
- 6. The extent to which the infringer has made use of the invention and any evidence probative of the value of that use.
- 7. The portion of the profit or of the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
- 8. The portion of the realizable profits that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer.
- 9. The opinion and testimony of qualified experts.

10. The amount that a licensor, such as the patentee, and a licensee, such as the infringer, would have agreed upon at the time the infringement began, if both sides had been reasonably and voluntarily trying to reach an agreement.

No one factor is dispositive, and you can and should consider the evidence that has been presented to you in this case on each of these factors. You may also consider any other factors that in your mind would have increased or decreased the royalty the alleged infringer would have been willing to pay and the patent holder would have been willing to accept, acting as normally prudent business people.

When determining a reasonable royalty, you may consider evidence concerning the amounts that other parties have paid for rights to the '216, '569, '293, '284, or '238 Patents or for rights to similar technologies. A license agreement need not be perfectly comparable to a hypothetical license that would have been negotiated between PanOptis and Huawei in order for you to consider it. However, if you choose to rely upon evidence from any license agreements, you must account for any differences between those licenses and the hypothetically negotiated license between PanOptis and Huawei when you make your reasonable royalty determination, including the type of technology licensed, whether the license contained a cross-license and/or similar patent protections, whether the license contained any value related to a release of liability, the date when the license was entered, the financial or economic conditions of the parties at the time the parties entered into the license, the extent of use, if any, of any particular licensed patents, the number of patents involved in the license, whether or not the license covered foreign intellectual property rights, the extent to which litigation may have affected the license, and, whether contrary to the hypothetical negotiation, the licensee in the real world license, at the time of entering the license, believed that the patents were either not infringed or were invalid. This

difference should also account for the assumption of the Parties during the hypothetical negotiation that the patents covered by the hypothetical license are valid and infringed, assumptions that may not have existed when other comparable licenses were agreed upon.

Damages for patent infringement must be apportioned to reflect the value the invention contributes to the accused products or features and must not include value from the accused products or features that is not attributable to the patent.

For the '216, '569, '293, and '284 Patents, which have a FRAND obligation to ETSI as part of the LTE standards, you must consider the following two factors:

- (1) any royalty for the patented technology must be apportioned from the value of the standard as a whole; and
- (2) the FRAND royalty rate must be based on the incremental value that the patented technology adds to the product, not any value added by the standardization of that technology.

In considering the evidence of a reasonable royalty, you are not required to accept one specific figure or another for the reasonable royalty. You are entitled to determine what you consider to be a reasonable royalty based upon your consideration of all of the evidence presented by the parties whether that evidence is of a specific figure or a range of figures.

A reasonable royalty can take the form of a running royalty or a fully paid-up, lump-sum royalty. A running royalty is a fee that is paid for the right to use the patent that is paid for each unit of the infringing product sold. A paid-up lump-sum is when the infringer pays a single price for a license covering both past and future infringing sales. If you find PanOptis is entitled to damages, you must decide whether the parties would have agreed to a running royalty or a fully paid-up lump sum royalty at the time of the hypothetical negotiation.

Now, with those instructions, we're ready to hear closing arguments from the attorneys in this case.

[ATTORNEYS PRESENT CLOSING ARGUMENTS]

I would now like to provide you with a few final instructions before you begin your deliberations. You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all the evidence, follow the law as I have given it to you, and reach a just verdict, regardless of the consequences.

Answer each question in the verdict form from the facts as you find them from this case, following the instructions that the Court has included. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

You will notice on the verdict form that one part of Question #1 and two parts of Question #3 have already been answered by the Court. Those answers have been determined as a matter of law by the Court, and you must accept them as correct. However, you should not draw any inference from those answers in your consideration of the rest of Question #1 and Question #3. In the event that you answer Question #4, you should treat the Court's answers no different from any answer you gave in Question #1 and Question #3 in following the instructions on the verdict form.

You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. This is true in patent cases between corporations, partnerships, or individuals. A patent owner is entitled to protect his rights under the laws of the United States. This includes bringing suit in a United States District Court for money damages for infringement. The law recognizes no distinction among

types of parties. All corporations, partnerships and other organizations stand equal before the law, regardless of size or who owns them, and are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you will each have a copy of this charge to take with you. If you desire to review any of the exhibits which the Court has admitted into evidence, you should advise me by a written note delivered to the Court Security Officer, and I will send that exhibit or exhibits to you. Once you retire, you should select your Foreperson and conduct your deliberations. If you recess during your deliberations, follow all of the instructions that the Court has given you about your conduct during the trial.

After you have reached your verdict, your Foreperson is to fill in on the verdict form which reflects your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. You must never disclose to anyone, not even to me, your numerical division on any question.

Any notes that you have taken during this trial are only aids to memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. The notes are not evidence. A juror who has not taken notes should rely on his or her independent recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time, you should give a message or question written by the Jury Foreperson to the Court Security Officer, who will bring it to me. I will then respond as promptly as possible, either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question.

After you have reached a verdict and I have discharged you, you are not required to talk with anyone about the case unless the Court orders otherwise.

I will now hand the verdict form and eight copies of these instructions to the Court Security Officer to deliver to the jury room.

Members of the jury, you may now retire to the jury room to deliberate; we await your verdict.

EXHIBIT A

Accused LTE Products
Ascend Mate2
Ascend XT
GX8 / G7 Plus
Honor 5X
Honor 6X
Honor 8
Mate 9
Nexus 6P
P8 Lite
Pronto
Raven
Sensa
SnapTo(Vision 3 LTE)
Union
Vitria
Honor 7X
Ascend XT2
Elate
Mate 10 Pro
Mate 10 Porsche Design

Accused LTE Products
Mate SE
MediaPad T1 8.0 Pro
MediaPad T1 10.0

EXHIBIT B

'238 Accused Products
Ascend Mate2
Ascend XT
GX8 / G7 Plus
Honor 5X
Honor 6X
Honor 8
Magna
Mate 9
Nexus 6P
P8 Lite
Pronto
Raven
Sensa
SnapTo (Vision 3 LTE)
Union
Vitria
Honor 7X
Ascend XT2
Elate
Mate 10 Pro

'238 Accused Products
Mate 10 Porsche Design
Mate SE
MediaPad T1 8.0
MediaPad T1 8.0 Pro
MediaPad T1 10.0
MediaPad M2
MediaPad M3
MediaPad M3 Lite 8
MediaPad M3 Lite 10
MediaPad T3 7
MediaPad T3 8
MediaPad T3 10

EXHIBIT C

For the '293 Patent:

- 3GPP TS 25.309; FDD Enhanced Uplink; Overall description; V6.6.0 (2006-03);
- U.S. Patent No. 8,576,784 to Löhr; and
- Prior art named in the '293 Patent itself, including the prior art identified at column
 1, line 23 through column 2, line 61.

For the '569 Patent:

- U.S. Patent No. 6,473,467 to Wallace; and
- U.S. Patent No. 5,646,935 to Ishikawa.

For the '238 Patent:

- ITU-T Packet-Based Multimedia Communications Systems (H.323);
- ITU-T Video Coding for Low Bit-Rate Communication (H.263);
- U.S. Patent No. 7,099,387 to Bjontegaard;
- U.S. Patent No. 6,690,307 to Karczewicz; and
- U.S. Patent No. 7,263,232 to Srinivasan.